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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,001	11/01/2001	Wen Zhao	555255012288	7436

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EXAMINER	
PHAM, TUAN	
ART UNIT	PAPER NUMBER
2618	

MAIL DATE	DELIVERY MODE
02/04/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/004,001	ZHAO ET AL.	
	Examiner	Art Unit	
	TUAN A. PHAM	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 November 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *42 and 44-53* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *42, and 44-53* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Applicant's remark, filed on 11/21/2007, with respect to the rejection(s) of claim(s) 42, 44-53 under 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made over in view of Kato et al. (EP 0898222 A1).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. **Claims 42, 44, and 46-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over (Nokia user's manual 900i 06/07/1998, hereinafter, "PA") in view of Kato et al. (EP 0898222 A1, hereinafter, "Kato").**

Regarding claim 42, PA teaches a communication device comprising (see figure 2-11, page 2-10):

a keyboard having at least twenty six keys that are each labeled with a different letter and ten keys that are each labeled with different number and characters and configured to generated an output signal (see figure 2-11, page 2-10), the number being 2-9 respectively for keys labeled with A-C, D-F, G-I, J-L, M-O, P-S, T-V and W-Z (see figure 1-1, page 1-1, the keypad of mobile phone is arranged the number 2 respectively for the key labeled with A-C, the number 3 respectively for the key labeled with D-F, and so on);

a processor for converting the output signal into a character code (see page 3-2, it is obvious that the PDA should be included a processor for converting a signal to character code when the user using the text);

means for converting the output signal into a telephony tone signal (see page 3-2, 4-5, it is obvious that the PDA should be included a processor for converting a signal to telephone tone when the user dial the number, DTMF);

software applications stored by the communication device and executed by the processor (see page 2-8), and

a keyboard mode control software module that automatically controls whether the keyboard output signals from the keys are converted into character codes or telephony

tone signals based on which of the plurality of software applications is active (see figure 2-11, the keyboard as shown in figure 2-11 is store plurality of applications to support multiple mode, each mode is associated with different software application. When the user selects the telephone mode from the keyboard, the controller automatically run on the telephone software application, and when the user select the calculator mode, the controller automatically run on calculator software application, page 2-8, 2-10, 2-11).

It should be noticed that PA fails to teach a keyboard having at least twenty six keys that are each labeled with a different letter of the alphabet and with an assigned number and configured to generate an output signal. However, Kato teaches the plurality of keys that are each labeled with a different letter of the alphabet and with an assigned number and configured to generate an output signal (see figure 11, the keys number 2 is labeled with letter I, key number 3 is labeled with letter U, it is obvious that one skill in the art should be recognize and applying the teaching of Kato to modify the 26 keys of the keyboard of PA with includes the number and letter for each key).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kato into view of PA in order to easily remember the positions of the frequently used vowels, thereby, improving the operability as suggested by Kato at [0037].

Regarding claim 44, PA further teaches QWERTY keyboard (see figure 2-11).

Regarding claim 46, PA further teaches a mode key with which a user can switch conversion of the output signals from telephony signals to character codes (see

figure 2-11, application button 1, page 2-10, the user can press the application button 1 to select the mode).

Regarding claim 47, PA teaches a communication device comprising (see figure 2-11, page 2-10):

a keyboard having at least twenty six keys that are each labeled with a different letter and ten keys that are each labeled with different number and characters and configured to generated an output signal (see figure 2-11, page 2-10).

It should be noticed that PA fails to teach a keyboard having at least twenty six keys that are each labeled with a different letter of the alphabet and with an assigned number and configured to generate an output signal, and means for generating, for each key pressed by a user, a telephony tone signal corresponding to the number assigned to the pressed key. However, Kato teaches the plurality of keys that are each labeled with a different letter of the alphabet and with an assigned number and configured to generate an output signal (see figure 11, the keys number 2 is labeled with letter I, key number 3 is labeled with letter U, it is obvious that one skill in the art should be recognize and applying the teaching of Kato to modify the 26 keys of the keyboard of PA with includes the number and letter for each key), and means for generating, for each key pressed by a user, a telephony tone signal corresponding to the number assigned to the pressed key (see figure 11, pressing keys labeled with number 1-5 that is associated with the dial numbers 1-5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kato into view of PA in order

to easily remember the positions of the frequently used vowels, thereby, improving the operability as suggested by Kato at [0037].

Regarding claim 48, PA further teaches the numbers 2-9 are assigned respectively to keys labeled A-C, D-F, G-I, J-L, M-O, P-S, T-V and W-Z (see figure 1-1, page 1-1, the keypad of mobile phone is arranged the number 2 respectively for the key labeled with A-C, the number 3 respectively for the key labeled with D-F, and so on).

Regarding claim 49, PA further teaches QWERTY keyboard (see figure 2-11).

Regarding claim 50, Kato further teaches each key is labeled with its assigned number (see figure 11, keys 2-3).

Regarding claim 51, PA teaches a communication device (see figure 2-11, page 2-10):

a keyboard with letters arranged in a QWERTY configuration (see figure 2-11, QWERTY keyboard with the letter arrange on each key), each of the letters being assigned a number in the range 0-9 (see figure 1-1, page 1-1, the keypad of mobile phone is arranged the number 2 respectively for the key labeled with A-C, the number 3 respectively for the key labeled with D-F, and so on).

It should be noticed that PA fails to teach the device being operative, for each letter pressed by a user, to communicate the number assigned to the pressed letter (see figure 11, pressing keys labeled with number 1-5 that is associated with the dial numbers 1-5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kato into view of PA in order

to easily remember the positions of the frequently used vowels, thereby, improving the operability as suggested by Kato at [0037].

Regarding claim 52, PA further teaches the numbers 2-9 are assigned respectively to keys labeled A-C, D-F, G-I, J-L, M-O, P-S, T-V and W-Z (see figure 1-1, page 1-1, the keypad of mobile phone is arranged the number 2 respectively for the key labeled with A-C, the number 3 respectively for the key labeled with D-F, and so on).

Regarding claim 53, PA further teaches the communicating of the numbers is through telephony tone signals (see figure 1, DTMF tone).

4. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Public Application (Nokia user's manual 900i 06/07/1998, hereinafter, "PA") in view of Kato et al. (EP 0898222 A1, hereinafter, "Kato") as applied to claim 42 above, and further in view of Ahlemeyer et al. (US Patent No.: 4,888,815, hereinafter, "Ahlemeyer").

Regarding claim 45, PA and Kato, in combination, fails to teach display the character codes. However, Ahlemeyer teaches such features (see col.6, ln.47-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Ahlemeyer into view of PA and Kato in order to provide the geographical region selected by the user as suggested by Ahlemeyer at col.6, ln.47-50.

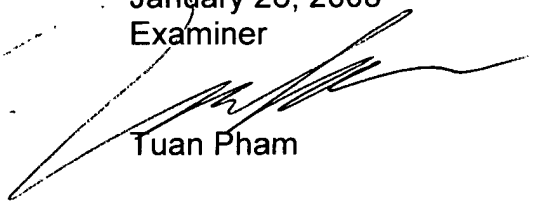
Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A. Pham whose telephone number is (571) 272-8097. The examiner can normally be reached on Monday through Friday, 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Technology 2600
Art Unit 2618
January 26, 2008
Examiner



Tuan Pham